Australian Bureau of Statistics

6202.0 - Labour Force, Australia, Oct 2008

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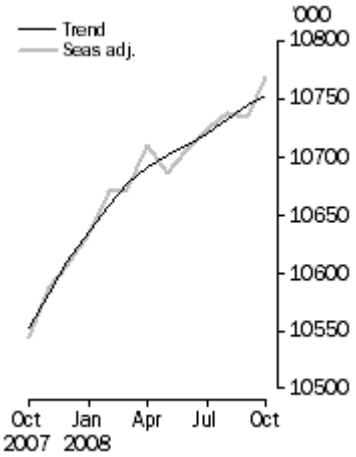
Summary

Main Features

OCTOBER KEY FIGURES

	Sep 2008	Oct 2008	Sep 08 to Oct 08	Oct 07 to Oct 08
Trend				
Employed persons ('000)	10 743.9	10 752.8	8.8	1.9%
Unemployed persons ('000)	478.0	478.9	0.9	0.8%
Unemployment rate (%)	4.3	4.3	0.0pts	0.0pts
Participation rate (%)	65.2	65.2	0.0pts	0.0pts
Seasonally Adjusted				
Employed persons ('000)	10 734.0	10 768.3	34.3	2.1%
Unemployed persons ('000)	480.9	487.9	7.0	2.2%
Unemployment rate (%)	4.3	4.3	0.0pts	0.0pts
Participation rate (%)	65.1	65.3	0.1pts	0.2pts

Employed Persons



Unemployment rate

OCTOBER KEY POINTS

TREND ESTIMATES (MONTHLY CHANGE)

- EMPLOYMENT increased to 10,752,800
- UNEMPLOYMENT increased to 478,900
- UNEMPLOYMENT RATE remained steady at 4.3%

- PARTICIPATION RATE remained steady at 65.2%

SEASONALLY ADJUSTED ESTIMATES (MONTHLY CHANGE)

EMPLOYMENT

- increased by 34,300 to 10,768,300. Full-time employment decreased by 9,200 to 7,688,200 and part-time employment increased by 43,500 to 3,080,100.

UNEMPLOYMENT

- increased by 7,000 to 487,900. The number of persons looking for full-time work increased by 10,200 to 338,200 and the number of persons looking for part-time work decreased by 3,200 to 149,700.

UNEMPLOYMENT RATE

- remained steady at 4.3%. The male unemployment rate remained steady at 4.0%, and the female unemployment rate increased by 0.1 percentage point to 4.8%.

PARTICIPATION RATE

- increased by 0.1 percentage point to 65.3%.

NOTES

FORTHCOMING ISSUES

ISSUE	Release Date
November 2008	11 December 2008
December 2008	15 January 2009
January 2009	12 February 2009
February 2009	12 March 2009
March 2009	9 April 2009
April 2009	7 May 2009

ROUNDING

Estimates of monthly change shown on the front cover have been calculated using unrounded estimates, and may be different from, but are more accurate than, movements obtained from the rounded estimates. The graphs on the front cover also depict unrounded estimates.

SAMPLING ERRORS

The estimates in this publication are based on a sample survey. Because the entire population is not enumerated, the published estimates and the movements derived from them are subject to sampling variability. Standard errors give a measure of this variability and appear on pages 28 and 29.

The 95% confidence intervals below provide another way of looking at the variability inherent in estimates from sample surveys. The interval bounded by the two limits is the 95% confidence interval, which represents a 95% chance that the true value of the estimate lies within that interval.

Movements in seasonally adjusted series between September and October 2008

	Monthly change	95% Confidence interval		
Total Employment	34 300	-26 300	to	94 900
Total Unemployment	7 000	-24 600	to	38 600
Unemployment rate	0.0 pts	-0.2 pts	to	0.2 pts
Participation rate	0.1 pts	-0.3 pts	to	0.5 pts

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Mary Piechowski on Canberra (02) 6252 6525.

Forthcoming Changes

FORTHCOMING CHANGES

REVISION OF POPULATION BENCHMARKS

Labour Force Survey (LFS) estimates of persons employed, unemployed and not in the labour force are calculated to add up to independent estimates of the civilian population aged 15 and over, referred to as population benchmarks. For the LFS estimates these population benchmarks are based on Census of Population and Housing (Census) data, adjusted for under-enumeration and updated for births, deaths, interstate migration, and net permanent and long term migration. Revisions are made to population benchmarks after each five-yearly Census.

From the February 2009 issue of the **Labour Force, Australia** (cat. no. 6202.0) and subsequent associated Labour Force releases, LFS estimates will be compiled using population benchmarks based on results from the 2006 Census. Additionally, for the period June 2001 to January 2009, LFS estimates will be revised based on the 2006 population benchmarks. The revised estimates will also be available with the release of the February 2009 issue of this publication on 12 March 2009.

REVISION OF LABOUR FORCE SURVEY STATISTICAL REGIONS

LFS Statistical Region boundaries are revised at each sample redesign to align with the **Australian Standard Geographical Classification (ASGC)** (cat. no. 1216.0). From the February 2009 issues of **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001) and **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003), regional estimates will be produced based on the 2006 LFS Statistical Regions. Additionally, LFS estimates will be revised back to November 2007 based on the new regions. For further details, see **Information Paper: Labour Force Survey Sample Design** (cat. no. 6269.0).

CLASSIFICATION OF INDUSTRY AND OCCUPATION

From the February 2009 issue of **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003) the industry and occupation employment estimates will be based on new classification structures.

Industry will be classified to the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006. This classification system will replace the existing classification ANZSIC 1993, for the periods November 1984 to the current release. Industry data will continue to be collected in the LFS to the Group (3 digit) level. For more information on the implementation of ANZSIC 2006 see **Information Paper: update on ANZSIC 2008 Implementation, 2006** (cat. no. 1295.0.55.001).

Occupation will be classified to the Australian and New Zealand Standard Classification of Occupations (ANZSCO). This classification system will replace the classification Australian Standard Classification of Occupations (ASCO) Second Edition, introduced in August 1996. Occupation data will continue to be collected in the LFS to the Unit Group (4 digit) level. For more information on the implementation of ANZSCO see **Information Paper: ANZSCO - Australian and New Zealand Standard Classification of Occupations, 2005** (cat. no. 1221.0).

TIME SERIES SPREADSHEETS

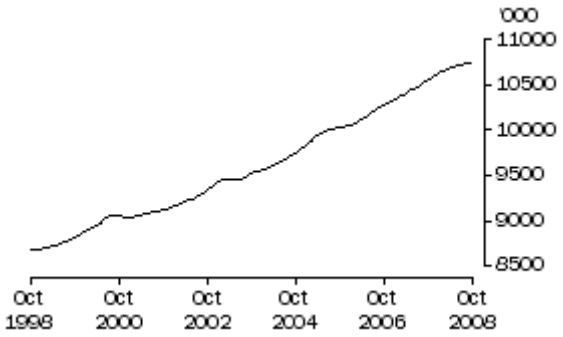
On the ABS website, the February 2009 issue of **Labour Force, Australia** (cat. no. 6202.0) will include its corresponding time series spreadsheets on the same catalogue number. These spreadsheets are currently found at **Labour Force, Australia, Spreadsheets** (cat. no. 6202.0.55.001), which will cease following the January 2009 issue on 12 February 2009.

Principal labour force series,Trend estimates

PRINCIPAL LABOUR FORCE SERIES TREND ESTIMATES

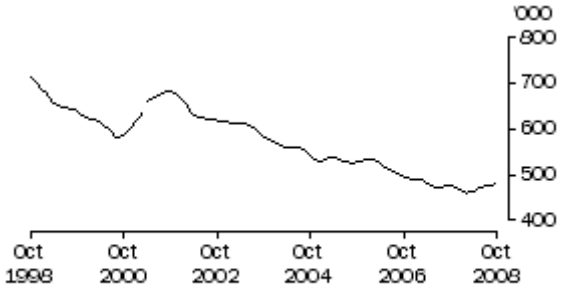
EMPLOYED PERSONS

The trend estimate of employed persons rose from 8,674,900 in October 1998 to 9,056,500 in September 2000. The trend then fell slightly to 9,037,700 in December 2000, before generally rising to stand at a high of 10,752,800 in October 2008.



UNEMPLOYED PERSONS

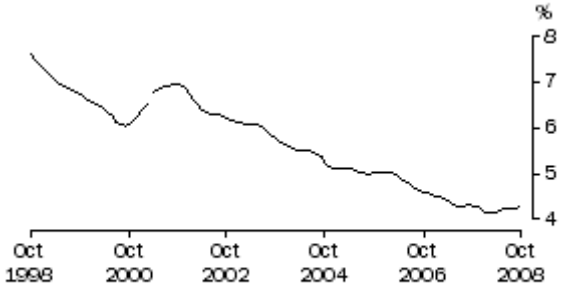
The trend estimate of unemployed persons generally fell from 713,000 in October 1998 to 583,000 in September 2000, before rising to 681,100 in October 2001. The trend generally fell to 459,500 in February 2008, before generally rising to stand at 478,900 in October 2008.



Series break at April 2001; see paragraph 16 of Explanatory Notes.

UNEMPLOYMENT RATE

The trend unemployment rate generally fell from 7.6% in October 1998 to 6.0% in September 2000, before rising to 7.0% in October 2001. The trend generally fell to 4.1% in February 2008, before rising slightly to stand at 4.3% in October 2008.



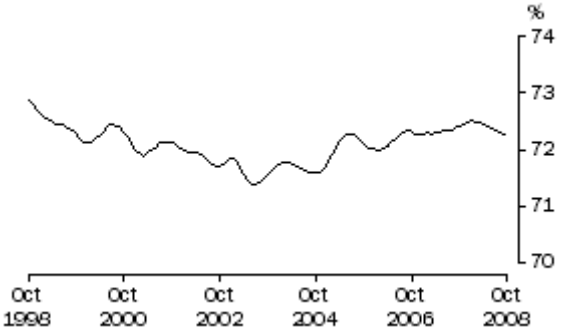
Series break at April 2001; see paragraph 16 of Explanatory Notes.

Participation Rate,Trend Series

PARTICIPATION RATE TREND SERIES

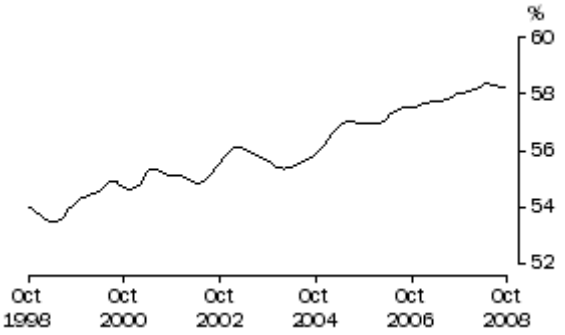
MALES

The trend estimate of the male participation rate generally fell from 72.9% in October 1998 to 71.3% in July 2003. The trend then generally rose to 72.5% in February 2008. The trend has since generally fallen to stand at 72.2% in October 2008.



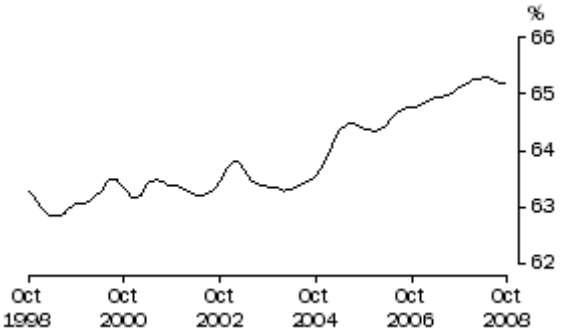
FEMALES

Apart from a decline from 54.0 in October 1998 to 53.5 in April 1999, the trend estimate of the female participation rate generally rose from 54.0% in October 1998 to 56.1% in March 2003. After falling to 55.4% in February 2004, the trend has since generally risen to stand at 58.3% in October 2008.



PERSONS

The trend estimate of the participation rate fell from 63.3% in October 1998 to 62.8% in May 1999. The trend, although fluctuating, generally rose to 65.3% in April 2008. The trend has since fallen to stand at 65.2% in October 2008.



About this Release

Summary results of the monthly Labour Force Survey containing estimates of employed and unemployed persons classified by sex, full-time/part-time status, states and territories and some age groups; and persons not in the labour force.

6202.0 was published as Labour Force, Australia, Preliminary until March 2003. As the publication had provided final summary data for a number of years to that point, the misleading qualification preliminary was removed from the April 2003 issue onwards.

Explanatory Notes

Explanatory Notes

EXPLANATORY NOTES

INTRODUCTION

1 This publication contains estimates of the civilian labour force derived from the Labour Force Survey component of the Monthly Population Survey. The full time series for estimates from this publication are also available electronically - see **Labour Force, Australia, Spreadsheets** (cat. no. 6202.0.55.001). More detailed estimates are released one week after this publication in various electronic formats - see **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001) and **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003).

CONCEPTS, SOURCES AND METHODS

2 The conceptual framework used in Australia’s Labour Force Survey aligns closely with the standards and guidelines set out in Resolutions of International Conferences of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling the estimates, are presented in **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001) which is available on the ABS website <https://www.abs.gov.au> .

LABOUR FORCE SURVEY

3 The Labour Force Survey is based on a multi-stage area sample of private dwellings (currently about 22,800 houses, flats, etc.) and a list sample of non-private dwellings (hotels, motels, etc.), and covers about 0.24% of the population of Australia. Information is obtained from the occupants of selected dwellings by specially trained interviewers.

4 The information is collected using computer-assisted interviewing (CAI), whereby responses are recorded directly onto an electronic questionnaire on a notebook computer. The CAI method was progressively implemented from October 2003 to August 2004, replacing the 'pen and paper' method previously used.

5 Households selected for the Labour Force Survey are interviewed each month for eight months, with one-eighth of the sample being replaced each month. The first interview is conducted face-to-face. Subsequent interviews are conducted by telephone (if acceptable to

the respondent).

6 The interviews are generally conducted during the two weeks beginning on the Sunday between the 5th and 11th of each month. The information obtained relates to the week before the interview (i.e. the reference week). Each year, to deal with operational difficulties involved with collecting and processing the Labour Force Survey around the Christmas and New Year holiday period, interviews for December start four weeks after November interviews start, and January interviews start five weeks after December interviews start. As a result, January interviewing may commence as early as the 7th or as late as the 13th, depending on the year. Occasionally, circumstances that present significant operational difficulties for survey collection can result in a change to the normal pattern for the start of interviewing.

7 Estimates from the Labour Force Survey are published first in this publication 32 days after the commencement of interviews for that month, with the exception of estimates for each December which are published 39 days after the commencement of interviews.

SCOPE OF SURVEY

8 The Labour Force Survey includes all persons aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

COVERAGE

9 In the Labour Force Survey, coverage rules are applied which aim to ensure that each person is associated with only one dwelling, and hence has only one chance of selection. The coverage rules are necessarily a balance between theoretical and operational considerations. Nevertheless, the chance of a person being enumerated at two separate dwellings in the survey is considered to be negligible.

POPULATION BENCHMARKS

10 Labour Force Survey estimates are calculated in such a way as to add up to independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are projections of the most recently released quarterly Estimated Resident Population (ERP) data. For information on the methodology used to produce the ERP see **Australian Demographic Statistics** (cat. no. 3101.0)**.** To create the population benchmarks for the Labour Force Survey, the most recently released quarterly ERP estimates are projected forward one quarter past the period for which they are required. The projection is based on the historical pattern of each population component - births, deaths, interstate migration and overseas migration. By projecting one quarter past that needed for the current population benchmarks, demographic changes are smoothed in, thereby making them less noticeable in the population benchmarks.

11 The ERP series are revised annually in the March quarter issue of **Australian Demographic Statistics** (cat. no. 3101.0), released in September each year, to incorporate more up to date information available for the population components. The revised ERP estimates are used to update the quarterly population projections used in creating the Labour Force Survey population benchmarks. Benchmarks already used in producing

Labour Force Survey estimates are not updated. A process of smoothing is used in the creation of population benchmarks to reduce the effect of these annual revisions to ERP estimates on the Labour Force Survey population benchmarks.

12 Every five years the ERP series are revised to incorporate additional information available from the latest Census of Population and Housing. Following the incorporation of Census information, the ERP series prior to the latest Census are final and subject to no further revision. Labour Force Survey population benchmarks, and the estimates, are revised following this 5-yearly revision in the ERP. From the February 2004 issue of this publication, labour force estimates have been compiled using population benchmarks based on the results of the 2001 Census of Population and Housing. Revisions were made in that issue to historical labour force estimates from January 1999 to January 2004.

ESTIMATION METHOD

13 The estimation method used in the Labour Force Survey is Composite Estimation, which was introduced in May 2007. Composite Estimation combines data collected in the previous six months with current month's data to produce the current month's estimates, thereby exploiting the high correlation between overlapping samples across months in the Labour Force Survey. The Composite Estimator combines the previous and current months' data by applying different factors according to length of time in the survey. After these factors are applied, the seven months of data are weighted to align with current month population benchmarks. For details see **Information Paper: Forthcoming Changes to Labour Force Statistics, 2007** (cat. no. 6292.0).

COMPARABILITY OF SERIES

14 From April 1986, the definition of employed persons was changed to include persons who worked without pay between 1 and 14 hours per week in a family business or on a farm (i.e. contributing family workers). For further information, see paragraphs 36 and 37 of the Explanatory Notes to the February 1987 issue of **Labour Force, Australia** (cat. no. 6203.0).

15 The ABS introduced telephone interviewing into the Labour Force Survey in August 1996. Implementation was phased in for each new sample group from August 1996 to February 1997. During the period of implementation, the new method produced different estimates than would have been obtained under the old methodology. The effect dissipated over the final months of implementation and was no longer discernible from February 1997. The estimates for February 1997 and onwards are directly comparable to estimates for periods prior to August 1996. For further details, see the feature article in the June 1997 issue of **Labour Force, Australia** (cat. no. 6203.0).

16 From April 2001 the Labour Force Survey has been conducted using a redesigned questionnaire containing additional data items and some minor definitional changes. The definition of unemployed persons was changed to include all persons who were waiting to start work and were available to start in the reference week. This change was introduced in February 2004, when historical unit record data were revised from April 2001 to January 2004. This revision created a small trend break at April 2001 in unemployed persons and unemployment rate series. For further details, see **Information Paper: Forthcoming Changes to Labour Force Statistics** (cat. no. 6292.0), released in December 2003.

17 Core labour force series were revised in April 2001 for the period April 1986 to March 2001 for the remaining definitional changes introduced with the redesigned questionnaire, to reduce the impact of the changes on labour force series. For further details, see

Information Paper: Implementing the Redesigned Labour Force Survey Questionnaire (cat. no. 6295.0) and **Information Paper: Questionnaires Used in the Labour Force Survey** (cat. no. 6232.0).

18 In May 2007, an improved method of estimation, known as composite estimation, was introduced into the Labour Force Survey. In introducing this change the ABS revised unit record data from April 2001 to April 2007 based on the new estimation method. While estimates for periods prior to April 2001 are unrevised and were compiled using a different estimation method, no trend break was identified in the employed persons series. Also, no change was identified in the trend breaks in the unemployed persons and unemployment rate series which arose with the introduction of a redesigned survey form in April 2001 (as noted above in paragraph 16). For further details, see **Information Paper: Forthcoming Changes to Labour Force Statistics, 2007** (cat. no. 6292.0), released on 21 May 2007.

SURVEY SAMPLE REDESIGN

19 The Labour Force Survey sample has been reselected using information collected in the 2006 Census of Population and Housing.

20 The bulk of the new sample was phased in over the period November 2007 to June 2008, with one-eighth of this portion of the sample being introduced every month. The remainder of the sample (about 20% of the total), which covers less settled areas of Australia and non-private dwellings was rotated in full for New South Wales, Western Australia, Northern Territory and Australian Capital Territory in March 2008, and for Victoria, Queensland, South Australia and Tasmania in April 2008. Such a pattern of implementation means that any changes to labour force estimates due to differences between the two samples, or any other influences, were spread over the eight months.

21 For further details, see **Information Paper: Labour Force Survey Sample Design** (cat. no. 6269.0), released on 28 November 2007.

RELIABILITY OF ESTIMATES

22 Two types of error are possible in an estimate based on a sample survey: sampling error and non-sampling error.

23 Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors. Standard errors of key estimates for the latest month and of movements since the previous month of these estimates are shown on pages 28 and 29. Standard errors for other estimates and other movements may be calculated by using the spreadsheet contained in **Labour Force Survey Standard Errors, Data Cube** (cat. no. 6298.0.55.001) which is available free of charge on the ABS website <https://www.abs.gov.au> (Statistics).

24 Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because information cannot be obtained from all persons selected in the survey. The Labour Force Survey receives a high

level of co-operation from individuals in selected dwellings, with the average response rate over the last year being 97%. See Glossary for definition of response rate.

SEASONAL ADJUSTMENT AND TREND ESTIMATION

25 Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove the irregular or non-seasonal influences which may be present in any particular month. This means that month-to-month movements of the seasonally adjusted estimates may not be reliable indicators of trend behaviour.

26 The Labour Force Survey uses the concurrent seasonal adjustment method to derive seasonal factors. Concurrent seasonal adjustment uses data up to the current month to estimate seasonal factors for the current and all previous months. This process can result in revisions each month to estimates for earlier periods. However, in most instances, the only noticeable revisions will be to the seasonally adjusted estimates for the previous month and one year prior to the current month.

27 The revision properties of the seasonally adjusted and trend estimates can be improved by the use of Autoregressive Integrated Moving Average (ARIMA) modelling. ARIMA modelling relies on the characteristics of the series being analysed to project future period data. The projected values are temporary, intermediate values, that are only used internally to improve the estimation of the seasonal factors. The projected data do not affect the original estimates and are discarded at the end of the seasonal adjustment process. The Labour Force Survey uses an ARIMA model for 95% of the individual time series. The ARIMA model is assessed as part of the annual reanalysis. For further details, see the feature article in **Australian Economic Indicators, Oct 2004** (cat. no. 1350.0).

28 Seasonal adjustment is able to remove the effect of events which occur at the same time in the survey every year. However, there are some events, like holidays, which are not always at the same time in the survey cycle or which are not at the same time across Australia. The effects of these types of events on Labour Force Survey estimates cannot in all cases be removed, because the pattern of their effects cannot be determined. However, two events which are adjusted for in the seasonally adjusted series are the January interview start date and the timing of Easter. For further details, see **Information Paper: Forthcoming Changes to Labour Force Statistics** (cat. no. 6292.0) released in December 2003.

29 While seasonal factors for the complete time series are estimated each month, they will continue to be reviewed annually at a more detailed level to take into account each additional year's original data. This annual review will not normally result in significant changes to published estimates. The review is usually conducted in February each year with the results released in the February issue of this publication.

30 The smoothing of seasonally adjusted series to produce 'trend' series reduces the impact of the irregular component of the seasonally adjusted series. These trend estimates are derived by applying a 13-term Henderson-weighted moving average to all months except the last six. The last six monthly trend estimates are obtained by applying surrogates of the Henderson average to the seasonally adjusted series. Trend estimates are used to analyse the underlying behaviour of a series over time.

31 While this smoothing technique enables estimates to be produced for the latest month, it does result in revisions in addition to those caused by the revision of seasonally adjusted

estimates. Generally, revisions due to the use of surrogates of the Henderson average become smaller, and after three months have a negligible impact on the series.

32 Trend estimates are published for the Northern Territory in table 10 and for the Australian Capital Territory in table 11. Unadjusted series for the two territories have shown, historically, a high degree of variability, which can lead to considerable revisions to the seasonally adjusted estimates each month when seasonal factors are estimated. For this reason, seasonally adjusted estimates are not currently published for the two Territories. In addition, caution should be exercised in the interpretation of trend estimates for the two territories, particularly for the three most recent months, where revisions may be relatively large.

33 For further information, see **A Guide to Interpreting Time Series - Monitoring Trends** (cat. no. 1349.0) or contact the Assistant Director, Time Series Analysis on (02) 6252 6345 or email time.series.analysis@abs.gov.au.

RELATED PUBLICATIONS

34 Users may also wish to refer to **Australian Labour Market Statistics** (cat. no. 6105.0). This publication contains additional tables and a detailed list of related publications. For further information about this publication, please contact the Assistant Director, Labour Market Statistics on (02) 6252 7636.

35 ABS Information about the labour market can be found on the Labour theme page on the ABS website <https://www.abs.gov.au>(Themes), or from ABS Bookshops.

36 Information about current publications and other products released by the ABS is available from the statistics page on the ABS website. The ABS also issues a daily Release Advice on the website (Future Releases) which details products to be released in the week ahead.

DATA AVAILABLE ON REQUEST

37 As well as the statistics included in this and related publications, the ABS may have other relevant data available. Inquiries should be made to the Labour Force contact officer on (02) 6252 6525, email labourforce@abs.gov.au or to any ABS office.

EFFECTS OF ROUNDING

38 Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

39 Estimates of movement shown in this publication are obtained by taking the difference of unrounded estimates. The movement estimate is then rounded to one decimal place. Therefore where a discrepancy occurs between the reported movement and the difference of the rounded estimates, the reported movement will be more accurate.

SYMBOLS AND ABBREVIATIONS

40 SYMBOLS AND ABBREVIATIONS

'000 thousands
ABS Australian Bureau of Statistics
CAI computer assisted interviewing
cat. no. catalogue number
ERP estimated resident population
f/t full-time
LFS Labour Force Survey
p/t part-time
pts percentage points
Seas adj. seasonally adjusted
TAFE Technical and Further Education

Glossary

GLOSSARY

Actively looking for work

Includes writing, telephoning or applying in person to an employer for work; answering an advertisement for a job; checking factory noticeboards or the touchscreens at the Centrelink offices; being registered with Centrelink as a jobseeker; checking or registering with any other employment agency; advertising or tendering for work; and contacting friends or relatives.

Attending full-time education

Persons aged 15-24 years enrolled at secondary or high school or enrolled as a full-time student at a Technical and Further Education (TAFE) college, university, or other educational institution in the reference week.

Attending school

Persons aged 15-19 years enrolled at secondary or high school in the reference week.

Attending tertiary educational institution full time

Persons aged 15-24 years enrolled full time at a TAFE college, university, or other educational institution in the reference week, except those persons aged 15-19 years who were still attending school.

Civilian population aged 15 years and over

All usual residents of Australia aged 15 years and over except members of the permanent defence forces, certain diplomatic personnel of overseas governments customarily excluded from census and estimated population counts, overseas residents in Australia, and members of non-Australian defence forces (and their dependants) stationed in Australia.

Composite Estimation

The estimation methodology used in the Labour Force Survey. Composite Estimation uses sample responses from nearby months as well as from the reference month to derive estimates for the reference month. This approach achieves gains in efficiency by exploiting

the high similarity between the responses provided by the same respondent in previous months. For details see **Information Paper: Forthcoming Changes to Labour Force Statistics, 2007** (cat. no. 6292.0).

Employed

All persons aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
    - away from work for less than four weeks up to the end of the reference week; or
    - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
    - away from work as a standard work or shift arrangement; or
    - on strike or locked out; or
    - on workers' compensation and expected to return to their job; or
- were employers or own account workers, who had a job, business or farm, but were not at work.

Employment to population ratio

For any group, the number of employed persons expressed as a percentage of the civilian population in the same group.

Full-time workers

Employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Labour force

For any group, persons who were employed or unemployed, as defined.

Labour force status

A classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force, as defined. The definitions conform closely to the international standard definitions adopted by the International Conferences of Labour Statisticians.

Not in labour force

Persons who were not in the categories employed or unemployed as defined.

Participation rate

For any group, the labour force expressed as a percentage of the civilian population aged 15 years and over in the same group.

Part-time workers

Employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week.

Response rate

The number of fully responding dwellings expressed as a percentage of the total number of dwellings excluding sample loss. Examples of sample loss include: dwellings where all persons are out of scope and/or coverage; vacant dwellings; dwellings under construction; dwellings converted to non-dwellings; derelict dwellings; and demolished dwellings.

Seasonally adjusted series

A time series of estimates with the estimated effects of normal seasonal variation removed. See Explanatory Notes 25 to 29 for more detail.

Trend series

A smoothed seasonally adjusted series of estimates. See Explanatory Notes 30 to 33 for more detail.

Unemployed

Persons aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

Unemployed looking for full-time work

Unemployed persons who:

- actively looked for full-time work; or
- were waiting to start a new full-time job.

Unemployed looking for part-time work

Unemployed persons who:

- actively looked for part-time work only; or
- were waiting to start a new part-time job.

Unemployment rate

For any group, the number of unemployed persons expressed as a percentage of the labour force in the same group.

Unemployment to population ratio

For any group, the number of unemployed persons expressed as a percentage of the civilian population in the same group.

Quality Declaration - Summary

INSTITUTIONAL ENVIRONMENT

Labour Force statistics are compiled from the Labour Force Survey which is conducted each month throughout Australia as part of the Australian Bureau of Statistics (ABS) household survey program. For information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

RELEVANCE

The Labour Force Survey provides monthly information about the labour market activity of Australia's resident civilian population aged 15 years and over. The Labour Force Survey is designed to primarily provide estimates of employment and unemployment for the whole of Australia and, secondarily, for each state and territory.

TIMELINESS

The Labour Force Survey enumeration begins on the Sunday between the 5th and 11th of the month, except for the Christmas and New Year holiday period. In December enumerations starts between the 3rd and 9th (4 weeks after November enumeration begins). In January enumeration starts between the 7th and 13th (5 weeks after December enumeration begins).

Key estimates from the Labour Force Survey are published in two stages. *Labour Force, Australia* (cat. no. 6202.0) and *Labour Force, Australia, Spreadsheets* (cat. no. 6202.0.55.001) are the first release. These data are released 32 days after the commencement of enumeration for the month, with the exception of estimates for December which are published 39 days after the commencement of enumeration.

Detailed data which were not part of the first release from the Labour Force Survey are published in *Labour Force, Australia, Detailed - Electronic Delivery* (cat. no. 6291.0.55.001) and *Labour Force, Australia, Detailed, Quarterly* (cat. no. 6291.0.55.003), which are released one week after the initial release.

ACCURACY

The Labour Force Survey is based on a sample of private dwellings (approximately 22,800 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.24% of the Australian Population. The Labour Force Survey is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each state and territory.

Two types of error are possible in an estimate based on a sample survey: non-sampling error and sampling error.

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because information cannot be obtained from all persons selected in the survey. The Labour Force Survey receives a high level of cooperation, with an average response rate for the last year being 97%.

Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors.

Standard errors of key estimates and movements since the previous month are available in *Labour Force, Australia* (cat. no. 6202.0). The standard error of other estimates and movements may be calculated by using the spreadsheet contained in *Labour Force Survey Standard Errors, Data Cube* (cat. no. 6298.0).

COHERENCE

The ABS has been conducting the Labour Force Survey each month since February 1978. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

The changes which have been made to the Labour Force Survey have included changes in sampling methods, estimation methods, concepts, data item definitions, classifications, and time series analysis techniques. In introducing these changes the ABS has generally revised previous estimates to ensure consistency and coherence with current estimates. For a full list of changes made to the Labour Force Survey see *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001) Table 20.2.

INTERPRETABILITY

The key estimates from the Labour Force Survey are available as original, seasonally adjusted and trend series. Seasonal adjustment is a means of removing the effects of normal seasonal variation from the series so other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove the irregular influences which may be present and therefore month-to-month movements may not be reliable indicators of underlying behaviour. To assist in interpreting the underlying behaviour, the ABS produces the trend series by smoothing the seasonally adjusted series to reduce the impact of the irregular component. For further information, see *A Guide to Interpreting Time Series - Monitoring Trends* (cat. no. 1349.0).

Further information on the terminology and other technical aspects associated with statistics from the Labour Force Survey can be found in the publication *Labour Force, Australia* (cat.

no. 6202.0), which contains detailed Explanatory Notes, Standard Error information and a Glossary.

ACCESSIBILITY

Please see the Related Information tab for the list of products that are available from this collection.

What If

WHAT IF...? REVISIONS TO TREND ESTIMATES

EFFECT OF NEW SEASONALLY ADJUSTED ESTIMATES ON TREND ESTIMATES

TREND REVISIONS

Each time new seasonally adjusted estimates become available, trend estimates are revised. This revision is a combined result of the concurrent seasonal adjustment process and the application of surrogates of the Henderson average to the seasonally adjusted series (see paragraphs 25 to 33 of the Explanatory Notes).

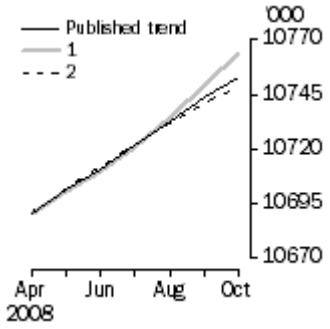
The examples in the tables below show two illustrative scenarios and the consequent revisions to previous trend estimates of employment and the unemployment rate. The revisions in the scenarios below are only due to the use of surrogates of the Henderson average, as the impact of revision of the seasonally adjusted estimates can not be estimated in advance.

1 The October seasonally adjusted estimate is **higher** than the September estimate by:
0.26% for employment
1.80% for the unemployment rate

2 The October seasonally adjusted estimate is **lower** than the September estimate by:
0.26% for employment
1.80% for the unemployment rate

The percentage changes of 0.26% and 1.80% were chosen because they represent the average absolute monthly percentage changes in employment and the unemployment rate respectively.

Employment



		Trend as published	WHAT IF NEXT MONTH'S SEASONALLY ADJUSTED ESTIMATE IS: (1) 10 796.3 i.e. rises by 0.26%	(2) 10 740.3 i.e. falls by 0.26%
2008				
	July	10 721.3	10 720.8	10 721.8
	August	10 732.8	10 734.4	10 731.9
	September	10 743.9	10 749.4	10 741.1
	October	10 752.8	10 764.0	10 748.4

Unemployment Rate

		Trend as published	WHAT IF NEXT MONTH'S SEASONALLY ADJUSTED ESTIMATE IS: (1) 4.4 i.e. rises by 1.80%	(2) 4.3 i.e. falls by 1.80%
2008				
	July	4.2	4.2	4.3
	August	4.3	4.3	4.3
	September	4.3	4.3	4.3
	October	4.3	4.3	4.3

Standard Errors

STANDARD ERRORS

STANDARD ERRORS

The estimates in this publication are based on information gained from the occupants of a sample survey of dwellings. Because the entire population is not surveyed, the published estimates are subject to sampling error. The most common way of quantifying such sampling error is to calculate the standard error for the published estimate or statistic. For more information, see paragraph 23 of the Explanatory Notes.

LEVEL ESTIMATES

To illustrate, let us say the published level estimate for employed persons aged 15-19 years is 700,000 and the associated standard error is 8,300. The standard error is then used to interpret the level estimate of 700,000. For instance, the standard error of 8,300 indicates that:

- There are approximately two chances in three that the real value falls within the range 691,700 to 708,300 (700,000 + or - 8,300)
- There are approximately nineteen chances in twenty that the real value falls within the range 683,400 to 716,600 (700,000 + or - 16,600).

The real value in this case is the result we would obtain if we could enumerate the total population.

The following table shows the standard errors for this month's level estimates.

		NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	AUSTRALIA Males	Females	Persons
Aged 15 years and over												
Employed												
Full time	'000	23.3	23.0	17.4	7.7	11.2	3.2	4.1	2.7	30.5	21.4	36.8
Part time	'000	15.9	14.5	11.2	5.4	7.5	2.3	1.5	1.8	11.9	19.4	23.6
Total	'000	25.6	28.0	19.8	8.8	12.3	3.7	5.0	2.8	33.0	30.1	41.7
Unemployed												
Looking for f/t work	'000	9.1	6.5	5.4	3.0	2.5	1.1	0.4	0.7	9.3	8.1	12.4
Looking for p/t work	'000	5.7	4.6	3.4	1.9	1.8	0.6	0.4	0.4	5.0	6.4	8.2
Total	'000	10.9	8.1	6.4	3.5	3.1	1.3	0.7	0.8	10.6	10.4	15.0
Labour force	'000	25.9	28.7	20.1	9.0	12.3	3.7	5.2	2.8	33.6	30.7	42.3
Not in labour force	'000	24.1	26.4	17.2	8.0	11.6	3.5	3.7	2.6	27.5	32.9	38.8
Unemployment rate												
Looking for f/t work	pts	0.4	0.3	0.3	0.5	0.3	0.6	0.5	0.5	0.2	0.3	0.2
Looking for p/t work	pts	0.6	0.5	0.5	0.7	0.5	0.7	1.5	0.9	0.5	0.3	0.2
Total	pts	0.3	0.3	0.3	0.4	0.3	0.5	0.5	0.4	0.2	0.2	0.1
Participation rate	pts	0.5	0.7	0.6	0.7	0.7	0.9	3.2	1.0	0.4	0.4	0.2
Aged 15-19 years												
Employed												
Full time	'000	3.9	3.0	3.2	1.3	2.2	0.6	0.4	0.5	5.4	4.1	6.4
Part time	'000	5.3	4.8	4.3	1.8	2.7	0.8	0.5	0.7	6.2	7.1	9.0
Total	'000	6.3	5.5	5.4	2.2	3.6	1.0	0.6	0.8	7.8	7.8	10.8
Unemployed												
Looking for f/t work	'000	3.0	2.1	2.1	1.3	1.1	0.5	0.2	0.2	3.6	2.9	4.6
Looking for p/t work	'000	3.4	2.9	2.6	1.2	0.9	0.3	0.2	0.4	3.6	3.9	5.3
Total	'000	4.7	3.6	3.4	1.8	1.5	0.6	0.3	0.5	5.1	4.8	7.1
Labour force	'000	6.9	5.9	5.8	2.4	3.7	1.1	0.7	0.9	8.3	8.2	11.6
Not in labour force	'000	9.4	7.3	5.4	2.8	3.6	1.1	0.7	1.0	9.3	8.9	13.2
Unemployment rate												
Looking for f/t work	pts	3.7	4.1	2.8	5.4	2.9	6.0	4.6	5.7	1.9	3.0	1.6
Looking for p/t work	pts	2.0	2.0	1.9	3.0	1.5	2.7	4.0	4.0	1.5	1.2	0.9
Total	pts	1.9	1.8	1.6	2.8	1.4	2.9	3.1	3.3	1.2	1.1	0.8
Participation rate	pts	1.5	1.7	1.9	2.3	2.4	3.1	4.5	3.7	1.1	1.2	0.8
Unemployment to population ratio - looking for f/t work	pts	0.6	0.6	0.7	1.2	0.8	1.5	1.3	0.9	0.5	0.4	0.3

MOVEMENT ESTIMATES

The following example illustrates how to use the standard error to interpret a movement estimate. Let us say that one month the published level estimate for females employed part-time in Australia is 1,890,000; the next month the published level estimate is 1,900,000 and the associated standard error for the movement estimate is 9,500. The standard error is then used to interpret the published movement estimate of 10,000. For instance, the standard error of 9,500 indicates that:

- There are approximately two chances in three that the real movement between the two months falls within the range 500 to 19,500 (10,000 + or - 9,500)
- There are approximately nineteen chances in twenty that the real movement falls within the range -9,000 to 29,000 (10,000 + or - 19,000).

The following table shows the standard errors for this month's movement estimates.

		NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	AUSTRALIA Males	Females	Persons
Aged 15 years and over												
Employed												
Full time	'000	15.8	12.4	11.4	4.4	7.1	2.0	1.4	1.8	19.9	14.5	25.2
Part time	'000	9.8	8.2	6.8	3.0	4.4	1.4	0.7	1.1	8.5	13.1	15.5
Total	'000	18.7	15.0	14.8	6.0	8.8	2.5	1.6	2.1	21.7	19.6	30.3
Unemployed												
Looking for f/t work	'000	9.1	6.6	5.8	3.0	3.2	1.1	0.4	0.8	9.7	8.3	12.8
Looking for p/t work	'000	6.2	4.8	3.8	2.0	2.2	0.8	0.4	0.7	5.6	7.0	9.0
Total	'000	10.9	8.2	7.1	3.6	3.8	1.2	0.6	1.1	11.3	10.8	15.8
Labour force	'000	19.2	15.4	15.4	6.4	9.0	2.5	1.6	2.2	22.2	20.1	31.1
Not in labour force	'000	17.7	14.4	12.9	5.7	7.6	2.3	1.3	2.1	16.9	21.3	28.1
Unemployment rate												
Looking for f/t work	pts	0.4	0.4	0.3	0.6	0.3	0.6	0.5	0.5	0.2	0.3	0.2
Looking for p/t work	pts	0.6	0.6	0.6	0.8	0.6	1.0	1.5	1.2	0.6	0.3	0.3
Total	pts	0.3	0.3	0.3	0.5	0.3	0.5	0.6	0.5	0.2	0.2	0.1
Participation rate	pts	0.3	0.4	0.5	0.5	0.5	0.6	1.0	0.8	0.3	0.2	0.2
Aged 15-19 years												
Employed												
Full time	'000	3.0	2.3	2.7	1.0	1.8	0.5	0.3	0.4	4.3	3.4	5.0
Part time	'000	4.2	3.5	3.3	1.4	2.2	0.6	0.3	0.6	4.8	5.4	6.7
Total	'000	4.9	4.0	4.0	1.6	2.7	0.7	0.4	0.6	5.9	5.9	7.9
Unemployed												
Looking for f/t work	'000	3.1	2.1	2.6	1.3	1.6	0.5	0.2	0.4	3.7	3.3	5.0
Looking for p/t work	'000	3.5	3.2	2.8	1.2	1.1	0.4	0.2	0.5	3.9	4.0	5.5
Total	'000	4.7	3.6	3.6	1.8	1.9	0.7	0.3	0.6	5.4	5.1	7.4
Labour force	'000	5.2	4.2	4.2	1.8	2.7	0.8	0.5	0.7	6.2	6.2	8.3
Not in labour force	'000	5.9	4.6	3.9	1.8	2.5	0.8	0.5	0.7	6.6	6.4	8.8
Unemployment rate												
Looking for f/t work	pts	3.9	4.0	3.0	6.0	3.3	6.3	5.7	7.8	2.0	3.2	1.7
Looking for p/t work	pts	2.1	2.2	2.0	3.1	1.8	3.3	3.8	4.6	1.6	1.2	1.0
Total	pts	2.0	1.9	1.8	3.0	1.7	3.1	3.5	3.9	1.3	1.2	0.9
Participation rate	pts	1.1	1.2	1.4	1.7	1.8	2.3	2.9	2.9	0.8	0.9	0.6
Unemployment to population ratio - looking for f/t work	pts	0.7	0.6	0.9	1.2	1.0	1.5	1.2	1.5	0.5	0.5	0.3